The Department of Energy's Environmental Research and Analysis Program: Strategies and Specifics

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Abstract

Environmental concerns have been commanding increased attention from the gas and oil industry as new requirements and restrictions raise the cost of exploration and production and limit access to new resources. The mission of the Department of Energy's Gas and Oil Environmental Research and Analysis Program is to maximize the production and ultimate recovery of domestic oil and gas resources by lowering the cost of effective environmental protection. The program does this by; 1) providing sound science to industry and regulators to serve as the basis for risk-based regulation and compliance, 2) providing tools to regulators for making risk-based decisions, 3) developing lower cost environmental compliance technologies, and 4) working with Federal and State agencies to streamline regulations.

The American public depends on the Federal Government to assure an acceptable level of environmental quality for its citizens. This is demonstrated by the large number of Federal laws and regulations that mandate environmental programs and compliance by industry, states, municipalities and the populace. In turn, industry, states and others depend on the Federal Government to make environmental regulation cost effective and compliance feasible and reasonably economic. Also, in its role as steward of the national oil and gas resource, the Government has a responsibility to assure that resources are not prematurely abandoned because of environmental costs that do not result in commensurate benefits.

As part of its Federal role, the Department through this program identifies high priority environmental issues with industry and then conducts research and promotes sound environmental practices through outreach and assistance to industry. It works with federal and state regulators to promote a proper balance between environmental protection and economic and energy impacts. Activities address water, air and solid waste issues and are prioritized based on industry needs and the most effective federal role.

The program is young, only five years old, and is funded at a modest level. Already, it has made a large contribution to the knowledge base for environmental regulation and waste

management and works aggressively to transfer the results nationwide. It will continue to identify high impact environmental issues that significantly affect industry, States and Federal agencies and respond as the issues develop and change rapidly. Many of the current projects and past results will be presented.

One tool to be demonstrated in the presentation is the Internet Environmental Compliance Assistance System (ECAS) for the Petroleum Industry. The ECAS extracts major provisions from principal laws and regulations that govern oil and gas exploration and provides guidelines for regulatory compliance. The system, which can be accessed at www.bpo.gov/ECAS/main.html or through links on the National Petroleum Technology Office (NPTO) homepage, was developed for the DOE website and includes federal regulation compliance assistance, waste management plans, clean-up methods, emergency response guidelines, and permit application information. It can be used as a training and communication tool for field operation engineers or assist independent operators in their compliance activities.

The ECAS was formally introduced to industry at the SPE/EPA 1997 Exploration and Production Environmental Conference, in Dallas, Texas, March 3-5, 1997 and feedback from regulatory agencies, producers, and service companies was very positive. Major producers stated that the system was an ideal tool for instructing professionals within their organization who had little or no knowledge of laws and regulations regarding environmental compliance. They stated that the system would save them time and money that was presently being spent for familiarization and training. Regulatory Agencies were pleased that the system was available through the Internet and agreed it was an excellent information source. Future work with the States will provide links to the individual State advisories as they become available.

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